

Town of St Albans, Vermont

Stormwater Management Program 2019

Stormwater Management Program

The following represents the Town of St Alban's Stormwater Management Program, (SWMP) as required by the State of Vermont, Agency of Natural Resources, Department of Environmental Conservation, National Pollutant Discharge Elimination System, (NPDES), General Permit 3-9014 for Stormwater discharges from Small Municipal Separate Storm Sewer Systems (MS4). The SWMP contains measurable goals for the development and implementation of the six minimum control measures described in Subparts IV. F and G of the permit, and additional measures necessary to protect water quality described in Part IV of the permit.

WATER QUALITY BASED REQUIREMENTS

Pursuant to Clean Water Act 402(p) (3) (B) (iii), the permit includes provisions which require the permittee to reduce the discharge of pollutants to the maximum extent practicable, protect water quality, and to satisfy the Clean Water Act.

REQUIREMENTS TO MEET WATER QUALITY STANDARDS

Discharges shall not cause or contribute to an exceedance of applicable water quality standards for the receiving water. Applicable water quality standards are the Vermont Water Quality Standards that are in place upon the effective date of the permit.

Except for discharges addressed by part IV.C.1 of the permit, if at any time the Town becomes aware that a discharge causes or contributes to an exceedance of applicable water quality standards, the Town shall within 60 days of becoming aware of the situation eliminate the conditions causing or contributing to the exceedance of water quality standards. If elimination within 60 days is infeasible the Town shall document in its SWMP measures and anticipated timeframes to eliminate the conditions causing or contributing to the exceedance. Within 30 days of eliminating the condition, the Town shall document the measures used to correct the condition in the SWMP. The Town shall include in its annual report a description of any such discharges identified during the reporting period; a description of measures taken to eliminate conditions during the reporting period or the basis of a finding that elimination is infeasible; and a timeframe for completion of all steps necessary to eliminate such discharges. The Town shall comply with any additional requirements or schedules established by the Secretary, including any requirements to submit additional information concerning the potential cause of the exceedance.

DISCHARGES TO IMPAIRED WATERS

The Vermont Agency of Natural Resources (ANR) has identified both the Stevens Brook and Rugg Brook watersheds as being impaired by stormwater. The Town of St Albans intends to achieve compliance through the implementation of the SWMP contained on the following pages, to include specific actions outlined within the six minimum control measures.

The ANR considers Stevens Brook and Rugg Brook to be impaired due to non-support of aquatic life. For both watersheds, the source of the impairment from multiple sources is excessive stormwater runoff. For Stevens Brook and Rugg Brook the water quality target is represented by measuring stormwater volume, so that the loading capacity is actually the greatest volume of stormwater flows they will receive.

The SWMP contains several strategies aimed at reducing the flow for both watersheds. These strategies include educating the public on stormwater issues, working with local groups to perform stream cleanups, other stormwater mitigation projects, and controlling sediment through the implementation of a Construction Site Stormwater Runoff Controls and Post-Construction Stormwater Management ordinance. The ordinance will work towards the control of illicit discharges through the implementation of an Illicit Discharge Detection and Elimination Program (IDDE). Also, St Albans intends to continue existing programs associated with animal control that facilitate the quick removal of dead animals from our road system, and programs to minimize dog waste in Town parks.

DISCHARGES TO IMPAIRED WATERS WITH AN APPROVED TMDL

<u>Flow Restoration Plans</u> - The Town has been working in collaboration with the City of St Albans to complete a flow restoration plan (FRP) for Stevens Brook. It is the Town's intention to again partner with St Albans City for a Rugg Brook FRP; we applied for a VTrans grant to fund a flow restoration plan for Rugg Brook in August 2013. The Town shall submit the FRP's to the Secretary no later than three years after the date of issuance of an authorization to discharge to the Town under this permit. The FRP shall contain the following;

- An identification of the suite of necessary storm water BMP's that will be used to achieve the flow restoration targets.
- A design and construction schedule for the storm water BMP's that has been identified as necessary to achieve the flow restoration targets.
- A financing plan that estimates the cost of implementing the FRP.
- A regulatory analysis that identifies and describes what, if any, additional regulatory authorities will be needed to implement the FRP.

- An identification of regulatory assistance that will be needed to implement the FRP.
- An identification of any third party that is responsible for implementation of the FRP.

<u>Phosphorus Control Plan</u> – Shortly and in collaboration with the City, St Albans will begin developing a Phosphorus Control Plan (PCP) in accordance with permit requirements outlined in Section 8.2 of the MS4 Permit. The Town is prepared to follow the prescribed timeline for PCP implementation also outlined in the permit, including the first annual PCP report due on April 1, 2019. A brief description of the work to be completed is below:

- Review of PCP requirements and phosphorus reduction targets for both the Town of St Albans and the City of St Albans.
- Localize and categorize sources of phosphorus loading within both communities using the TMDL as guidance.
- Identify future projects that have good potential to result in phosphorus loading reductions.
- Evaluate the effectiveness of future projects in providing important reductions in phosphorus loading.
- Consider the cost-benefit of future potential improvements to strike an appropriate balance between cost and efficacy.
- Select projects most suited to for both the Town of St Albans and the City of St Albans.
- Provide general cost estimates for full compliance with permit requirements based on the selected and effective projects.
- Create an implementation strategy in accordance with permit requirements.
- Prepare an implementation table in accordance with MRGP requirements.
- Produce a final report and executive summary for public information.

<u>Landowner Technical Assistance</u> – The Town shall continue to identify opportunities for and provide technical assistance to landowners in the implementation by landowners of low impact BMP's.

<u>Protection and Regulation of Development in Stream Corridors</u> – In 2018 we updated our Unified Development Bylaws (UDB's). The current UDB's require all structures, impervious roadways and parking, and permeable roadways and parking have a minimum setback of 50 feet from the center of all watercourses. Also, new development in St Albans is required to submit for review and approval, a vegetation and landscape plan. The Town will further evaluate strengthening its buffer policy by embarking on a plan to map stream corridors to depict areas that have been converted to impervious surface and areas that are undeveloped or have not been converted to impervious surface. This will allow the Town to identify specific areas of the stream corridor that warrant additional protections.

<u>Flow and Precipitation Monitoring Program</u> – Continuously, the Town and the City will be evaluating options for addressing flow and precipitation monitoring within Rugg Brook and Stevens Brook. The Town will submit notification to the DEC in a timely manner.

<u>Six Minimum Control Measures</u> – The Town has developed a SWMP which contains the required Six Minimum Control Measures to reduce pollutants to the Maximum Extent Practical.

MINIMUM CONTROL MEASURES (MCM 1 – 6)

- 1. Public Education and Outreach on Storm Water Impacts (Best Management Practice –BMP)
- BMP 1-1 <u>Maintain Storm Water Website</u> The Town will create and maintain a stormwater tab on their website, which will contain stormwater information. The Town will update it periodically to keep the general and regional stormwater information accurate. The Town's website is www.stalbanstown.com. The Regional Stormwater Education Program (RSEP) shall create a regional stormwater website; the two sites will be linked to each other.
- BMP 1-2, 3, 4 <u>Participate in RSEP</u> (MCM 2.9) The Town, in collaboration with the City of St Albans will develop and participate in the RSEP that will be managed thru NRPC. The Town will continue to participate in regional stormwater education and outreach thru the RSEP, which may adopt the name Franklin County Clean Streams (FCCS) for a portion of the public outreach program. A memo of understanding is being drafted and will be submitted upon execution. This RSEP will follow the guidance provided in the following EPA identified documents:
 - -fact sheet 2.3, Stormwater Phase II Final Rule, Public Education and Outreach Minimum Control Measure (January 2000), http://www.epa.gov/npdes/pubs/fact2-3.pdf;
 - -National Menu of Best Management Practices for NPDES Stormwater Phase II, http://cfpub.epa.gov/npdes/stormwater/menuofbmps/index.cfm;
 - Measurable Goals Guidance for Phase II Small MS4s, http://cfpub.epa.gov.npdes/stormwater/measureablegoals/index.cfm

- BMP 1-5a-b <u>Develop & Distribute Informational Brochures</u> The RSEP will develop or acquire informational brochures once the RSEP is formalized. The RSEP will distribute brochures to both municipalities.
- BMP 1-5c

 News Media Feature Stories

 The RSEP will coordinate with the local newspaper, the St Albans Messenger to run at least two stories per year on stormwater related issues. The media outreach will aim for spring and fall timelines, and will include key messages on stormwater runoff and systems, with tips on prevention methods related to soil and lawn care and construction erosion.
- BMP 1-5d *For municipalities: Develop educational materials and meet with teachers* The RSEP will develop or acquire educational materials and conduct meeting(s) with teachers.

<u>Rationale</u>: Development of a regional stormwater program seemed the best approach to educating our unique integrated stormwater area since stormwater fails to recognize municipal boundaries.

<u>Person Responsible</u>: NRPC will be managing the RSEP, providing regional education and outreach to everyone choosing to work, live or play in Franklin County.

<u>Measurable Goals</u>: The MOU for the RSEP will be submitted upon execution. The brochures and a copy of news articles will be forwarded and the website work will be done. The websites shall be updated periodically. The RSEP will develop its programs, and coordinate all efforts with local watershed groups. The media stories and educational training will be documented.

2. Public Involvement and Participation

- BMP 2-3 <u>Institute an ongoing public workshop</u> RSEP will work with existing local/ regional organizations to conduct workshops that cover topics on targeted stormwater messages mentioned above a well as understanding of the connection with impervious area and water quality.
- BMP 2-4 <u>Inventory Storm Drains</u> The permittee will undertake an effort to update its storm drain inventory. Upon completion of the inventory, a stenciling storm drain project shall be developed.
- BMP 2-5 <u>Sponsor stream corridor cleanup day</u> RSEP will coordinate a community clean up event; this event may coincide with the annual Green Up Day in May. This event will target different stream reaches each year.

<u>Rationale</u>: The best management practices under this minimum measure are intended to educate the community with the goal of changing behavior by improving the level of awareness surrounding

water pollution. Our message – "it's our water, our solution" hopefully becomes a household buzz word and raises awareness.

Person Responsible: NRPC will be managing this effort.

<u>Measurable Goal</u>: The RSEP will document attendance at all workshops and training sessions. The number of bags collected at the clean up event will also be tracked. The storm drain inventory and stenciling program will be documented.

3. Illicit Discharge Detection and Elimination (IDDE)

- BMP 3-1

 Develop and enforce a program to detect and eliminate illicit discharges The 2013

 IDDE contract between DEC and Aldrich and Elliott found no illicit discharges within our community. St Albans will continue to assess the stormwater drainage system within the regulated small MS4 areas and throughout the remainder our community to pinpoint illicit discharges and if needed formulate an implementation schedule to address each illicit discharge.
- BMP 3-2 <u>Develop and maintain a storm sewer GIS layer</u> The Town has a comprehensive database of our stormwater drainage system. Town will continue to expand our GIS coverages in a three tiered approach to document 1) expand mapping of our existing stormwater infrastructure, 2) digitize new stormwater infrastructure as added through the Town's maintenance efforts and or capital improvement projects, and 3) map additional stormwater infrastructure associated with new development and integrate with our current GIS coverages.
- BMP 3-3

 Develop and implement an Illicit Discharge Ordinance During 2019, St Albans will develop, adopt, and implement an Illicit Discharge Ordinance. The ordinance will regulate the contribution of pollutants to the MS4 from stormwater discharges by any user, prohibit illicit connection and discharge to the MS4, and establish legal authority to carry out the IDDE program, including conducting inspections, monitoring, and enforcement procedures to ensure compliance with the ordinance. The ordinance should be adopted by the St Albans Selectboard by January 2020.
- BMP 3-4 <u>Develop and implement an illicit discharge detection plan, focus on impaired waters and random dumping</u> The Town will continue enforcement by public employees and combine that with continuing to inform businesses and citizens about the hazards associated with illegal discharges and improper disposal of waste water.
- BMP 3-5 <u>Inform public of illicit discharge and disposal hazards</u> The Town will continue to support the Franklin County RSEP as a creative, informative, and effective public

outreach program. The RSEP will continue to inform the public, businesses, and public employees about improper disposal methods and non-stormwater discharges.

- BMP 3-6

 Address specific categories of Illicit Discharges, if necessary The Town has not found non-stormwater discharges to be a significant contributor of pollutants to the MS4, and therefore have not addressed these categories within the IDDE plan. The Town will continue to evaluate specific categories of Illicit Discharges as listed in the permit, and if any are determined to present a significant risk to water quality, then the Town will address these issues.
- BMP 3-7 <u>Prepare annual report of monitoring and corrective actions taken</u> The Town will prepare annual reports as the MS4 permit requires and establish files to document complaints relating to illicit discharges. The complaint system will install a citizen complaint form on our Facebook and web pages.

<u>Rationale</u>: The best management practices and other activities identified under this MCM are aimed at identifying the illicit discharges, logging IDDE site information, and creating regulations to encourage compliance. Through the development of a stormwater utility/ordinance, the town will minimize future illicit discharges.

<u>Person Responsible</u>: Director of Administration and Department of Public Works employees will collaborate on this MCM.

<u>Measurable Goals and Implementation</u>: The Town has the following intended work products IDDE ordinance, additional GIS coverages/databases, and annual reports. Implementation and attainment of our goals in this measure will require the continued support of the community and Selectboard to support the enforcement of a local ordinance to regulate and prohibit illicit discharges.

4. Construction Site Stormwater Runoff Control

- BMP 4-1 <u>Develop and implement procedures to ensure MS4 construction activities are properly permitted</u> The town will develop a stormwater utility/ordinance to ensure proper permitting in the MS4 impaired areas as part of its current comprehensive bylaw update.
- BMP 4-2 Review existing regulations for effectiveness in managing construction related erosion and sedimentation; and their consistency with state construction permits—

 The town will review all erosion and sedimentation regulations to ensure that MS4 compliance is included in its land development bylaw updates.

BMP 4-3 Develop and implement an erosion and sediment ordinance that regulates development not subject to state permitting — Our future stormwater utility/ordinance will include requirements for projects that fall below the minimum regulatory threshold and are not subject to state or federal erosion control requirements. At a minimum, all sub-jurisdictional excavation projects will be required to conform with the guidance found on Low Risk Site Handbook for Erosion Prevention and Sediment Control (August 2006).

<u>Rationale</u>: The best management practices under this MCM are aimed at limiting erosion and sedimentation from land disturbance activities, thus preventing sediment discharge to the aquatic environment and to the municipal stormwater management system.

<u>Person Responsible</u>: Director of Administration and Zoning Administrator will be responsible for the management of stormwater runoff from active construction sites. Currently, All DRB decisions state that it is the responsibility of the applicant to acquire and fulfill all permit conditions (state and or federal) associated with projects involving land disturbance.

<u>Measurable Goal and Implementation</u>: The measurable goal will be the development, evaluation, adoption, and implementation of a stormwater utility/ordinance. Implementation and attainment of our goal will require the continued support of the community and Selectboard to support the adoption and implementation of a local ordinance to regulate adverse stormwater runoff from active construction sites.

5. Post-Construction Stormwater Management in New Development and Redevelopment.

- BMP 5-1

 Review existing regulations for effectiveness in managing stormwater runoff and consistency with state operational permits The town will evaluate its regulations and ensure that local post-construction stormwater standards are consistent with the State standards. Currently, All DRB decisions state that it is the responsibility of the applicant to acquire and fulfill all permit conditions (state and or federal) associated with projects involving land disturbance.
- BMP 5-2 <u>Develop and implement procedures to identify projects that disturb less than 1 acre</u>—
 The proposed stormwater utility/ordinance will include mechanisms to address postconstruction runoff from new development and redevelopment that result in a land
 disturbance of less than one acre and will ensure consistency with the requirements of
 state general permits regulating stormwater runoff from new development and
 redevelopment projects.

- BMP 5-3 Review all ordinances, planning, zoning and subdivision reg, or other regulatory mechanism for post-construction runoff Stormwater post-construction best management practice review will be included in our proposed stormwater utility/ ordinance.
- BMP 5-4 <u>Develop and implement inspection procedures for development</u> The town will develop and implement within the proposed stormwater utility/ordinance inspection procedures for new development and redevelopment to ensure that post-construction stormwater controls are being implemented and properly maintained over time.
- BMP 5-5 <u>Develop and implement procedures to ensure MS4 development activities are properly permitted.</u> This will be considered during the bylaw update mentioned in BMP 5-2 and 5-3.

<u>Rationale</u>: The Town understands the importance of post-construction stormwater management to limit volume and rate of flow, as well as the contribution of pollutants to the aquatic environment. The Town also understands that good post-construction stormwater management will result in a reduced burden on public stormwater infrastructure. As such, the Town considers this BMP to be a priority.

<u>Person Responsible</u>: Director of Administration and Zoning Administrator will be responsible for the management of stormwater runoff from post-construction sites. Currently, All DRB decisions state that it is the responsibility of the applicant to acquire and fulfill all permit conditions (state and or federal) associated with projects involving land disturbance.

<u>Measurable Goal and Implementation</u>: The measurable goal will be aimed primarily at improving clean water species counts by reducing or attenuating stormwater runoff volume and by reducing the effects of stormwater scouring and flooding.

The regulatory mechanisms chosen to address post-construction runoff from new development and redevelopment will be the proposed stormwater utility/ordinance. Implementation and attainment of our goal will require the continued support of the community and Selectboard to support the adoption and implementation of the proposed stormwater utility/ordinance to regulate adverse stormwater runoff from post-construction sites.

6. Pollution Prevention/ Good Housekeeping for Municipal Operations

BMP 6-1

Describe operation and maintenance program for reducing pollutant runoff from MS4 operations. — The Town is currently managing its municipal operations to reduce impacts to water quality however the procedures employed are not formally documented. The Town will develop and begin documenting operations and maintenance procedures to reduce pollutant runoff within the MS4 areas.

- BMP 6-1a New construction and land disturbance New construction and land disturbance associated with municipal operations shall be addressed through the provisions of MCM#4 and #5 of this permit.
- BMP 6-1b

 Maintenance of fleet and buildings, all municipal garages, parks, open space, construction and maintenance practices for gravel roads, snow disposal and storm water systems The town owns no buildings and no gravel roads in the MS4 areas. The Town will continue to document its efforts to reduce pollutants when providing snow removal services to those affected areas as part of the operations program to be developed. The Town regularly conducts erosion control projects along roads to reinforce roadside ditches to minimize erosion of the ditch lines and the edge of the roadways during periods of intense runoff. The Town also cleans roadside ditches of debris and buildup on a semi-annual and on an as needed basis to prevent damages to our roadside drainage system. Finally, the Town's road system serves primarily rural agricultural areas, where the Town has taken deliberate steps to preserve this land use, which generally prevents high density development within these areas.
- BMP 6-1c <u>Training, maintenance schedules, and inspection procedures for long-term structural controls</u> The town will formally document its operations, training, and inspection program to maintain the municipal stormwater infrastructure
- BMP 6-1d For municipal facilities where fertilizers are applied, prohibit the use of fertilizers containing phosphorus unless warranted by a soil test This shall be addressed in the maintenance and training program, currently the town does not use fertilizer and has no plans to do so in the future.
- BMP 6-2 For municipal garages, an MS4 may participate in ANR's Municipal Compliance

 Assistance Program The municipal facility is not located within the MS4-regulated area. The town will review ANR's municipal compliance assistance program and evaluate our future participation.
- BMP 6-3 <u>Provide a list of all industrial facilities that the MS4 owns or operates that are subject to the MSGP</u> The town does not own any industrial facilities.

<u>Rationale</u>: The best management practices under this minimum measure are aimed at improving municipal operations to better protect water quality and reduce the burden on public infrastructure.

<u>Person Responsible</u>: The Department of Public Works will be primarily responsible for this BMP, with assistance from the Director of Administration.

Measurable Goal and Implementation: The Town will develop and begin documenting operations and maintenance procedures to reduce pollutant runoff within the MS4 areas. This effort will have a benefit for streamlining operations and keeping pollutants out of surface waters.